Paragraph starting on Page 10, line 16:

Mathematically, the heat flux, Q, is proportional to the temperature difference, $DT = T_{skin} - T_{transition}$, divided by the thermal resistance, R, which is determined by the thermal path length:

$$Q_i \propto \Delta T/R = (T_{skin}-T_i)/R_i$$

where $T_1 > T_2 > T_3$ and $R_1 < R_2 < R_3$

Paragraph starting on Page 18, line 3:

The disadvantage of the current practice to strictly use insulation for thermal control is that the thermal resistance is fixed in the diving suit. As explained above, to avoid overheating or chilling, i.e. thermal discomfort, a balance must be achieved between the heat desired to be removed from the body to maintain comfort, Q_{equil} and the actual heat flow out of the suit, Q_{loss}. Since environmental conditions change constantly and since thermal conditions of the body are directly linked to the changing environment through this fixed heat transfer path, no latitude exists to achieve this balance at conditions other than those at the single environment for which a solution exists.

Paragraph starting on Page 20, line 13:

For $T_{e2} = 43$ F, $Q_{loss} = 619$ B/hr and for T_{e1} 33 F, $Q_{loss} = 840$ B/hr. Regardless of the change in external environment and Q_{loss}, Q_{equil} will be maintained as long as sufficient thermal capacitance of the phase change material is provided. Finally, the quantity of phase change material required to maintain this de coupling with the environment, assuming Te2 33F and a 21 5 B/hr delta between Q_{equil} and Q_{loss} is computed by equation [4] to be equivalent to 2 lbm/hr.

$$mass = \frac{(Q_{loss} - Q_{equil})\, t}{hr} \qquad [4]$$

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Paragraph starting on Page 21, line 29:

From these givens, one can compute Q_{loss} according to equation [5], below, to be equal to 21.4 B/hr in a 15 F environment and 24.5 B/hr in a SF environment. If one assumes no distribution of heat via the bloodstream, local chilling of the foot results and one can conservatively estimate a drop in temperature equal to 2 F/hr for the first case and 6.3 F/hr for the latter. Although this is less likely the case, had Q_{equil} exceeded Q_{loss}, a rise in foot temperature would occur with a tendency towards overheating.

Paragraph starting on Page 24, line 8:

For $T_{e1} = 15$ F, $Q_{loss} = 20.8$ B/hr and for T_{e2} 5 F, $Q_{loss} = 26.7$ B/hr. Regardless of the change in external environment and Q_{loss}, Q_{equil} will be maintained as long as sufficient thermal capacitance of the phase change material is provided. Finally, the quantity of phase change material required to maintain this de coupling with the environment, based on the extreme chosen, is computed by equation [8]. Assuming Te = 5F and a 6.8 B/hr delta between Q_{equil} and Q_{loss}, this mass is computed to be less than 0.1 lbm per hour.

$$mass = \frac{(Q_{loss} - Q_{equil})\, t}{h_f} \qquad [8]$$

Paragraph starting on Page 24, line 17:

Since the thermal capacity of this 1/4" layer is 63 B, continuous thermal equilibrium and comfort is maintained for up to nine hours (for comparison, this same change of environments for the traditional boot resulted in an increase in the temperature drop of the foot from 2 F/hr to 6.3 F/hr). After this point, the wax must be warmed and regenerated to its liquid state to maintain this same thermal equilibrium. If not, the thermal performance will simply reduce to that of

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